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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,707	10/27/2005	Masataka Kuwana	1004316.009US (4439-4036)	2198
85775 7590 03/30/2010 Locke Lord Bissell & Liddell LLP Attn: IP Docketing Three World Financial Center New York, NY 10281-2101			EXAMINER DUTT, ADITI	
			ART UNIT 1649	PAPER NUMBER
			NOTIFICATION DATE 03/30/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptopatentcommunication@lockelord.com

# Office Action Summary

**Application No.**

10/549,707

**Applicant(s)**

KUWANA ET AL.

**Examiner**

Aditi Dutt

**Art Unit**

1649

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-16, 19, 20 and 22 is/are pending in the application.  
4a) Of the above claim(s) 9-16, 19, 20 and 22 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 2-8 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB-06)  
4) ☐ Interview Summary (PTO-413)  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_  
Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Application, Amendments, And/Or Claims***

1. The pre-appeal brief of 19 October 2009 has been received and considered. Prosecution is hereby re-opened.
2. In view of the pre-appeal brief filed on 19 October 2009, and the notice of panel decision from Pre-Appeal Brief Review, dated 21 January 2010, all prior rejections have been withdrawn. PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

### ***New Rejection***

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-8, are rejected under 35 U.S.C. 102(a) as clearly anticipated by Kuwana et al., (J Leuko Biol 74: 833-845, 2003).

4. The claims are directed to a monocyte-derived multipotent cell (MOMC), that expresses CD14, CD34 and CD45, type I collagen and HLA-DR, wherein the cell differentiates into osteoblast, skeletal myoblast, chondrocytes, adipocytes, neurons, endothelial cells, and mesodermal cells.
5. Kuwana et al. teach a primitive group of cells, monocyte-derived mesenchymal progenitor cells (MOMP) (or MOMC) having fibroblast like morphology and obtained in vitro from human peripheral blood mononuclear cells (PBMCs) that were cultured on fibronectin (Abstract, Materials and methods). Kuwana et al also teach that the MOMP cells have the unique phenotype expressing CD14, CD34, CD45, type I collagen and HLA-DR (Table 2), and differentiates into endothelial and mesenchymal cells. The reference further teaches that MOMP cells can be induced to differentiate to various mesenchymal cell lineages like osteoblasts, skeletal myoblasts, chondrocytes, and adipocytes (abstract). Although the reference does not specifically teach the differentiation to neurons, this would be an inherent characteristic of the instantly claimed product MOMC, as further evidenced in a post-dated publication (Seta and Kuwana, Keio J Med 56: 41-47, 2007; Figure 1; Table 1). Since the reference teaches the MOMC cells of the claims, “the claiming of a new use, new function or **unknown property** which is inherently present in the prior art does not necessarily make the claim patentable (emphasis added). *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Because MOMP cells are derived from the same

source, cultured under the same condition and possess similar characteristics as explained above, the reference anticipates the instant invention.

Please note that Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

### ***Conclusion***

6. No claims are allowed.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditi Dutt whose telephone number is (571) 272-9037. The examiner can normally be reached on Monday through Friday, 9:00 a.m. to 5:00 p.m.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Stucker, can be reached on (571) 272-0911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

24 March 2010  
AD

/Jeffrey Stucker/

Supervisory Patent Examiner, Art Unit 1649